Petroleum Accumulation Dynamics of Lithologic Pools in Fu-Yang Reservoir, Daqing Placanticline

GuangRong Tian Petrochina, Lanzhou, China.

Hydrocarbon of in the Fu-Yang reservoir mainly came from the source rock of the first Member of the Qingshankou Formation. Petroleum accumulation process was controlled by source rocks, faults, sandbodies and their spatial configuration. Based on petroleum accumulation dynamics, this paper discussed the source rock, reservoir and hydrocarbon migration pathways in the Daqing placanticline. Overpressure of the source rock of the first Member of the Qingshankou Formation, mechanism of hydrocarbon discharge and process of hydrocarbon migration and accumulation have been analyzed. Hydrocarbon accumulation in the Fu-Yang reservoir underwent through 3 phases. i.e. on the end of Nenjiang Formation deposition, the end of Mingshui Formation deposition and the Neogene period. Three kinds of hydrocarbon accumulation models and hydrocarbon distribution in the Fu-Yang reservoir of the Daqing placanticline are summarized. This study has important significance for the instruction of the exploration of the Fu-Yang reservoir in the Songliao Basin.